## **Questions Directed to Ocean Liner Carriers**

1. What does your company see as the advantages and disadvantages of slow steaming?

## A: Advantages:

- (1) Slow steaming enables vessels to sail at economic speeds, cutting down fuel consumption costs.
- (2) Slow steaming reduces emission of greenhouse gas and shipping's impact on the environment.
- (3) Slow steaming offers greater buffer time in service rotation and improves on-time performance of sailing schedule.

## **Disadvantages**:

When vessels sail at low speeds, we have to refit the main engines and require more frequent maintenance at our own expenses, also slow steaming requires deployment of additional ships in a vessel string to maintain service levels. This not only mitigates somewhat (though not entirely) the fuel cost savings, it also adds costs to charter such vessels. Additional equipment is required in connection with these vessels, which adds further costs.

- 3. Do you have plans to increase or decrease slow steaming during 2011 and/or the years that follow?
- A: In the near future our fleet deployment is to decrease rather than increase the scale of slow steaming in our service network. By doing so, we can release extra vessels to launch new services in line with increasing customer demand. For example, we are planning to adjust the fleet of AUE service from 9 ships back to 8 ships this year.
- 4. What factors help your company decide to slow steam any given service string? What factors cause your company to decide whether to slow steam in one direction only?
- A: Environmental benefits are a significant factor in our decisions. However,

economic factors such as vessel cost and fuel price are also key factors in our study of a slow steaming case. When the saving in fuel cost outweighs the charter hire of an extra ship and the related equipment costs, it is worthwhile to adjust the service to slow steaming mode.

Apart from these factors, we have to consider customers' acceptance and the availability of a suitable berth window to fit the adjusted schedule.

- 7. Do you offer shippers, over the same trade lane, different transit times by reason of slow steaming vs. normal steaming?
- A: Yes, we offer various service options in the same trade lane. Among the 7 service strings that we operate in the Trans-Pacific trade, only 3 loops are running in slow steaming mode. Customers can select the suitable services based on their requirements.
- 9. Are there any costs incurred by the ships your company is slow steaming that would not accrue if they were operating at normal service speed and, if so, what are these costs and how significant are they?
- A: Yes, slow steaming requires the deployment of extra vessels, additional container equipment on these ships and refitting of main engines, all of which involve significant additional costs.
- 10. What factors constrain your company's ability to slow steam more services or to further slow down ships that are already slow steaming (i.e., super-slow steaming)?
- A: The increase of charter hire for the additional vessels needed can reduce the cost saving benefits and discourage application of slow steaming in more service strings.

The extent to which we stretch service loops for slow steaming is also determined by customer acceptance. The adjustment of transit time should not cause major interruption to customers' supply chains. Otherwise, it can result in business loss.

11. How many vessels do you add to service loops that begin slow steaming for part or all of the loop? Are there instances where vessels are not added?

- A: Each of our 3 slow steaming loops receives one extra vessel in its rotation. There are no services in which we have implemented slow steaming without adding ships. All 3 strings maintain weekly (7 Day) sailings
- 12. Is your company adding new vessels to your fleet to accommodate slow steaming?
- A: We have not had any new building vessels delivered in the past 2 years. Therefore, we did not deploy any new vessels for the purpose of slow steaming in U.S. trades.
- 13. Are new ship designs incorporating hull and propulsion engine innovations to better accommodate slow steaming?
- A: In light of more and more stringent environment standards, we believe that slowing steaming will become a normal pattern of fleet deployment. Therefore, we are incorporating the application of slowing steaming into the designs of our new buildings, including vessel hull, main engine and relative devices.
- 14. How has slow steaming impacted your company's on time performance of sailing schedules?
- A: Slowing steaming does not affect the on-time performance of our sailing schedule. In fact, slowing steaming provides greater buffer time to absorb possible delay caused by unexpected incidents.
- 15. Are some shipper accounts more affected by slow steaming than others? If so, please explain. What measures has your company taken to try to mitigate any adverse impact of slow steaming on specific shipper accounts?
- A: The perishable and time-sensitive cargoes require shorter transit time so as to maintain longer shelf life in the import countries. To meet such demand, we provide several service options with different transit time.
- 16. To what extent has slow steaming affected your company's ability to maintain or expand capacity in the U.S. trades and/or its ability to maintain adequate availability of containers at appropriate inland locations?

- A: After being switched to slow steaming pattern, our TPS, AUE and AUE-2 services maintain the same weekly capacity in the Trans-Pacific trade, carrying approximately the same volumes of cargoes to US inland points. Therefore, slow steaming does not affect our capacity supply and our ability to provide adequate containers at inland locations.
- 17. Do you believe slow steaming is sustainable over the long-run? Please explain why or why not.
- A: Increasing environmental regulations and targets make slow steaming attractive. Vessel cost and fuel price will have a significant impact on whether it is economically viable to adopt slow steaming. As long as the saving in fuel cost exceeds the charter hire of an additional ship, we believe slow steaming remains a sustainable approach of fleet deployment.
- 18. If your company participates in one or more vessel sharing arrangements ("VSAs"), describe whether and to what extent VSAs are positively or negatively impacted by slow steaming.
- A: Yes, we have a vessel sharing arrangement with one partner in U.S. trade. The adoption of slow steaming is not a main concern in our cooperation. However, as long as slow steaming conforms to our mutual interests, we will apply it to the VSA services.